

**What is claimed is:**

1. A composition for oral uptake of substance comprising an appropriate amount of carbohydrates.
- 5 2. A composition for the oral delivery of one or more substances comprising an effective amount of an orally administered beta-glucan and one or more chemotherapeutic agents.
- 10 3. The composition of any one of claims 1 or 2, wherein the carbohydrate is glucan.
- 15 4. The composition of claim 3, wherein the glucan contains 1,3-1,6 or 1,3-1,4 mixed linkages or a mixture of both 1,3-1,6 and 1,3-1,4 mixed linkages.
- 20 5. The composition of claim 3, wherein the glucan enhances the efficacy of chemotherapeutic agents or anti-cancer antibodies.
- 25 6. The composition of claim 3, wherein the glucan is derived from grass, plants, mushroom, yeast, barley, fungi, wheat or seaweed.
- 30 7. The composition of claim 3, wherein the glucan is of high molecular weight.
8. The composition of claim 3, wherein the substance is a peptide, protein, RNA, DNA or plasmid.
9. The composition of claim 3, wherein the substance is a chemotherapeutic agent.

10. A composition comprising an effective amount of orally administered (1→3), (1→6) or (1→3), (1→4) beta-glucan capable of enhancing efficacy of IgM antibodies.
- 5 11. The composition of claim 10, wherein the antibody is an antibody against cancer.
12. The composition of claim 11, wherein the antibody is a tumor-binding antibody.
- 10 13. The composition of claim 12, wherein the antibody is capable of activating complement.